

ENTER (DIS), GRA, NOD, BON OR ?:end L1 STRUCTURE CREATED

=> s 11

SAMPLE SEARCH INITIATED 11:04:23 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 22417 TO ITERATE

4.5% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 439381 TO 457299

PROJECTED ANSWERS: 0 TO

L2 0 SEA SSS SAM L1

=> batch 11 ENTER BATCH REQUEST NAME OR (END):sss

'SSS' IS NOT A VALID BATCH NAME Enter the name you wish to use for the BATCH request. The name must:

- 1. Begin with a letter,
- 2. Have 1-12 characters,
- 3. Contain only letters (A-Z) and numbers (0-9),
- 4. End with /B,
- 5. Not already be in use as a saved name, and
- 6. Not be: END, SAV, SAVE, SAVED, or an L#. ENTER BATCH REQUEST NAME OR (END):CC692559/b ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:sss ENTER SCOPE OF SEARCH (FULL) OR RANGE:ful QUERY L1 HAS BEEN SAVED AS BATCH REQUEST 'CC692559/B'

0 ANSWERS

=> activate cc692559/a

L1 STR

L2 18 SEA FILE=REGISTRY SSS FUL L1

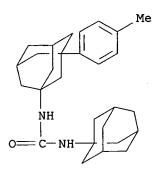
=> d scan

L2 18 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN Urea, N-[3-(4-methylphenyl)tricyclo[3.3.1.13,7]dec-1-yl]-N'-

tricyclo[3.3.1.13,7]dec-1-yl- (9CI)

MF C28 H38 N2 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

0.43

0.64

FULL ESTIMATED COST

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FILE COVERS 1907 - 30 Jun 2005 VOL 143 ISS 1 FILE LAST UPDATED: 29 Jun 2005 (20050629/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr 1-17 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN AN 2004:902086 CAPLUS DN 141:388753 Heterocyclic compound modulators of Tie-2 and other kinases, and TI therapeutic use Chen, Jeff; Dalrymple, Lisa; Epshteyn, Sergery; Forsyth, Timothy; Huynh, IN Tai; Leahy, James; Mann, Grace; Mann, Larry W.; Ridgway, Brian; Sangalang, Joan C.; Takeuchi, Craig Exelixis, Inc., USA PA PCT Int. Appl., 126 pp. SO CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 APPLICATION NO. PATENT NO. KIND DATE \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ WO 2004091480 A2 20041028 WO 2004-US10626 20040408 ΡI W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRAI US 2003-461471P 20030409 MARPAT 141:388753 OS The invention provides heterocyclic compds. for modulating protein kinase AΒ enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion. Compds. of the invention inhibit, regulate and/or modulate kinases,

particularly Tie-2. Methods of using the compds. and pharmaceutical compns. thereof to treat kinase-dependent diseases and conditions are also an aspect of the invention. Preparation of triazolyl compds. of the invention is included.

#### IT 783327-32-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(heterocyclic compound modulators of Tie-2 and other kinases, and therapeutic use)

783327-32-2 CAPLUS RN

Urea, N-[2-[5-(3-chloro-4-methoxyphenyl)-3-(4-pyridinyl)-1H-1,2,4-triazol-CN 1-y1]ethy1]-N-cyclopenty1-N'-[(1R,2S)-2-phenylcyclopropy1]- (9CI) INDEX NAME)

Absolute stereochemistry.

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ANSWER 2 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
L3
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AN 2004:875033 CAPLUS

DN 141:332214

Preparation of quinoline, tetrahydroquinazoline, and pyrimidine ΤI

derivatives as MCH antagonist for treatment of CNS disorders Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Busujima, IN Tsuyoshi; Tran, Thuy-Anh; Han, Sangdon; Casper, Martin; Kramer, Bryan A.; Semple, Graeme; Zou, Ning Taisho Pharmaceutical Co. Ltd., Japan

PA

so Eur. Pat. Appl., 586 pp. CODEN: EPXXDW

DTPatent

LA · English

FAN.CNT 3

	PAT	CENT	NO.			KINI	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
ΡI	EP	1464	335			A2	_	2004	1006		EP 2	004-	7651			2	0040	330
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
									MK,									
	ΕP	1464	335	-	-	A2		2004	1006	•	EP 2	004-	7651			2	0040	330
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
									MK,									
PRAI	US	2003	•		•	P		2003										
	US	2003	-495	911P		P		2003	0819									
	US	2003	-510	186P		P		2003	1009									
	US	2003	-530	360P		P		2003	1216									
	ΕP	2004	-765	1		Α		2004	0330									
GI																		

$$(T)_{p} \xrightarrow{\mathbb{R}^{2}} (T)_{p} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{2}$$

$$(T)_{p} \xrightarrow{\mathbb{R}^{2}} \mathbb{R}^{2}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}$$

an

ΙT

AB Title compds. I, II, and III [wherein R1 = (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, aryl; R2 = H, halo, OH, carboxy, carbamoyl, amino, (un)substituted alkyl, alkoxy; T = independently H, halo, OH, carboxy, carbamoyl, amino, cyano, NO2, alkenyl, alkynyl, cycloalkyl, (un)substituted alkyl, alkoxy; p = 0-5; L = aminocycloalkylideneamino, etc.; Y = bond, CH2, CO2, OCO, SO2, CO, CS, CONH, CSNH, etc.; with provisos; and pharmaceutically acceptable salts, hydrates, or solvates thereof] were prepared as antagonists of melanin concentrating hormone (MCH),

IV

endogenous ligand of G-protein coupled receptors (GPCRs). Examples include solution and solid phase general synthetic methods and phys. data for nearly 3400 invention compds. In addition, all exemplified compds. were assayed using high throughput functional screening to detect intracellular Ca2+ concns. for accessing GPCR activation. For instance, reaction of 2,4-dichloro-6-methylpyrimidine with dimethylamine gave 2-chloro-4-(dimethylamino)-6-methylpyrimidine (40%), which was coupled with cis-(4-aminocyclohexyl)carbamic acid tert-Bu ester (60%). Deprotection (72%), amidation, and workup provided the benzamide IV-TFA. The latter demonstrated MCH antagonist activity with an IC50 value of 7.6 nM. Thus, pharmaceutical compns. comprising I are useful for the prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension, dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders, and dyskinesias including Parkinson's disease, epilepsy, and addiction (no data). This is part III of three in a series covering the patent.

773140-54-8P, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-5-methylpyrimidin-2-yl]amino]cyclohexyl]urea 773140-55-9P, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methylpyrimidin-2-yl]amino]cyclohexyl]urea 773140-59-3P, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-

(dimethylamino)-5-methylpyrimidin-2-yl]amino]cyclohexyl]-N-methylurea 773140-60-6P, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methylpyrimidin-2-yl]amino]cyclohexyl]-N-methylurea RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MCH antagonist; preparation of quinolines, quinazolines, and pyrimidines as MCH antagonist for treatment of CNS disorders)

RN 773140-54-8 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-5-methyl-2-pyrimidinyl]amino]cyclohexyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 773140-55-9 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methyl-2-pyrimidinyl]amino]cyclohexyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 773140-59-3 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[4-(dimethylamino)-5-methyl-2-pyrimidinyl]amino]cyclohexyl]-N-methyl- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 773140-60-6 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methyl-2-pyrimidinyl]amino]cyclohexyl]-N-methyl- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:875032 CAPLUS

DN 141:350191

TI Preparation of quinoline, tetrahydroquinazoline, and pyrimidine derivatives as MCH antagonist for treatment of CNS disorders

IN Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Busujima,
 Tsuyoshi; Tran, Thuy-Anh; Han, Sangdon; Casper, Martin; Kramer, Bryan A.;
 Semple, Graeme; Zou, Ning

PA Taisho Pharmaceutical Co. Ltd., Japan

SO Eur. Pat. Appl., 586 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 3

114.	PATENT				KIN	D	DATE		1	APPL:	ICAT:	ION 1	10.		D	ATE	
PI	EP 146			•	A2	-	2004	1006		EP 2	004-	7651			2	0040	330
	R	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			SI,														
	EP 146							1006									
	R	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

PRAI	US	2003-458530P	P	20030331
	US	2003-495911P	P	20030819
	US	2003-510186P	P	20031009
	US	2003-530360P	P	20031216
	ΕP	2004-7651	Α	20040330
GI				

$$(T)_{p} \xrightarrow{R^{2}} (T)_{p} \xrightarrow{R^{2}} N$$

$$L^{Y}_{R^{1}} I$$

an

Title compds. I, II, and III [wherein Rl = (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, aryl; R2 = H, halo, OH, carboxy, carbamoyl, amino, (un)substituted alkyl, alkoxy; T = independently H, halo, OH, carboxy, carbamoyl, amino, cyano, NO2, alkenyl, alkynyl, cycloalkyl, (un)substituted alkyl, alkoxy; p = 0-5; L = aminocycloalkylideneamino, etc.; Y = bond, CH2, CO2, OCO, SO2, CO, CS, CONH, CSNH, etc.; with provisos; and pharmaceutically acceptable salts, hydrates, or solvates thereof] were prepared as antagonists of melanin concentrating hormone (MCH),

endogenous ligand of G-protein coupled receptors (GPCRs). Examples include solution and solid phase general synthetic methods and phys. data for nearly 3400 invention compds. In addition, all exemplified compds. were assayed using high throughput functional screening to detect intracellular Ca2+ concns. for accessing GPCR activation. For instance, reaction of 2,4-dichloro-6-methylpyrimidine with dimethylamine gave 2-chloro-4-(dimethylamino)-6-methylpyrimidine (40%), which was coupled with cis-(4-aminocyclohexyl)carbamic acid tert-Bu ester (60%). Deprotection (72%), amidation, and workup provided the benzamide IV•TFA. The latter demonstrated MCH antagonist activity with an IC50 value of 7.6 nM. Thus, pharmaceutical compns. comprising I are useful for the prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension,

dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders, and dyskinesias including Parkinson's disease, epilepsy, and addiction (no data). This is part II of three in a series covering the patent.

IT 771535-28-5P 771539-54-9P 771540-43-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MCH antagonist; preparation of quinolines, quinazolines, and pyrimidines as MCH antagonist for treatment of CNS disorders)

RN 771535-28-5 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-5,6,7,8-tetrahydro-2-quinazolinyl]amino]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 771539-54-9 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-2-quinolinyl]amino]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 771540-43-3 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-2-pyrimidinyl]amino]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:857578 CAPLUS

DN 141:350189

TI Preparation of novel quinazolines as MCH receptor antagonists

IN Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Busujima, Tsuyoshi; Tran, Thuy-Anh; Han, Sangdon; Casper, Martin; Kramer, Bryan A.

PA Taisho Pharmaceutical Co., Ltd., Japan; Arena Pharmaceuticals Inc.

SO PCT Int. Appl., 363 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

GI

	PATENT	NO.			KIN	D	DATE		2	APPL	ICAT	ION 1	NO.		D	ATE	
ΡI	WO 2004	0876	80		A1		2004	1014	1	WO 2	004-	JP45	54		2	0040	330
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
							ТJ,										
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LÙ,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
		TD,	TG														
PRAI	us 2003	-458	424P		P		2003	0331									
os	MARPAT	141:	3501	89													

The title compds. QLYR1 [I; Q = (un) substituted 2-quinazolinyl; R1 = AB (un) substituted alkyl, cycloalkyl, aryl, etc.; L = II, III (wherein R5, R6 = H, alkyl; A, B = a bond, CH2, (CH2)2), etc.; Y = (un)substituted CONH, CSNH,  $C(\bar{O})O$ , SO2, etc.] which act as MCH receptor antagonists, were prepared E.g., a multi-step synthesis of 1-(3,4-dimethoxyphenyl)-3-[cis-4-(4dimethylaminoquinazolin-2-ylamino)cyclohexyl]-urea hydrochloride (starting from quinazoline-2,4-dione) which showed IC50 of 13 nM against MCH receptor binding, was given. The compds. I are useful in pharmaceutical compns. (claimed) which use includes prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension, dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders and dyskinesias including Parkinson's disease, epilepsy, and addiction.

IT 774199-67-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel quinazolines as MCH receptor antagonists)

RN 774199-67-6 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-2-quinazolinyl]amino]cyclohexyl]-N'[(2S)-2-phenylcyclopropyl]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

# RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:622568 CAPLUS
- DN 139:164710
- TI Preparation of ureidoalkylpiperidines as modulators of chemokine CCR3 receptor activity.
- IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III; Wacker, Dean A.
- PA Bristol-Myers Squibb Pharma Company, USA
- SO U.S., 145 pp., Cont.-in-part of U.S. Ser. No. 465,286, abandoned. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 10

t van •		TENT		<b>_</b>		KINI		DATE			APPL	ICAT:	ION 1	NO.			ATE	
ΡI		6605	623			В1		2003	0812			000-				_	0000	
		6331																
	ZA	2001	0037	56		Α		2002	0509		ZA 2	001-	3756			20	0010	509
	CA	2413 2001	274			AA		2001	1227	1	CA 2	001-	2413	274		2	0010	620
	WO	2001	0982	69		A2		2001	1227	1	WO 2	001-	US19	745		2	0010	520
	WO	2001																
		W:										BG,						
												FI,						
			HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,
												MZ,						
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										TR,	Br,	ВJ,	Cr,	CG,	CI,	CM,	GA,	GIV,
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		K:			CY,		DR,	ES,	rn,	GD,	GR,	ΤΙ,	шт,	шо,	ип,	55,	110,	,
	.TĐ	2004	_	-	-			2004	0617		TP 2	002-	5042	25		2	0010	620
		2003						2003	0116		US 2	001-	7172			2	0011	023
		6521				B2		2003			-		. – . –					
	US	2004	0025	15		A1		2004			US 2	002-	2794	16		2	0021	024
	US	2004 6875 2004	776			B2		2005	0405									
	US	2004	0061	07		A1		2004	0108		US 2	002-	2792	31		2	0021	024
	US	6780	857			В2		2004	0824									
	US	2004	0589	60		A1		2004			US 2	003-	4651	91		2	0030	619
	US	6906	04058960 06066			В2		2005	0614									
PRAI	US	1998	5906066 1998-112717P 1999-161243P			P		1998	1218									
	US	1999	1999-161243P					1999	1022									
	US	1999-465286				B2		1999	1217									
	US	1999	-161															

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US 1999-161184P
                           Ρ
                                 19991022
     US 1999-161222P
                          Р
                                 19991022
                          A3
     US 1999-465287
                                 19991217
                          А3
                                 19991217
     US 1999-465288
     US 1999-465948
                          Α3
                                 19991217
     US 2000-213051P
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                                 20000621
     US 2000-598821
                          Α
                                 20000621
     WO 2001-US19745
                          W
                                 20010620
     MARPAT 139:164710
OS
GT
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$$\begin{array}{c|c}
J-M & R^4 \\
K & N & \parallel \\
L-Q & E-N & NR^{2}R^{3}
\end{array}$$

[Title compds. I; M = CH2, CHR5, CHR13, CR13R13, CR5R13; Q = CH2, CHR5, AΒ CHR13, CR13R13, CR5R13; J, L = CH2, CHR5, CHR6, CR6R6, CR5R6; Z = O, S; M = CH2, CHR5; CHR13, CR13R13, CR5R13; K = CHR5, CR5R6; Z = O, S; E =(CHR7)(CHR9)v(CR11R12); R1, R2 = H, alkyl, alkenyl, alkynyl, (substituted)alkylcycloalkyl; R2R3 = atoms to form a (substituted) 5-7 membered ring; R3, R5 = (substituted) (alkyl)cycloalkyl, (alkyl)heterocyclyl; R4 = null, O, alkyl, alkenyl, alkynyl, etc.; R4 with R7, R9, or R11 = atoms to form a 5-7 membered ring; R6 = alkyl, alkenyl, alkynyl, etc.; R7, R9 = H; R4R7, R4R9 = (substituted) spirocyclyl; R13 = alkyl, alkenyl, alkynyl, cycloalkyl, etc.; R11R12 = pyrrolidinyl, tetrahydrofuryl, piperidinyl, tetrahydropyranyl; v = 1, 2, were prepared as modulators of chemokine activity (no data) for preventing asthma and other allergic diseases. Thus, 4-benzyl-1-(3-aminopropyl)piperidine (preparation given) in THF was treated with 3-cyanophenyl isocyanate to give N-(3-cyanophenyl)-N'-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]urea. A pharmaceutical composition comprising the compound I was claimed.

IT 275812-98-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidoalkylpiperidines as modulators of chemokine CCR3 receptor activity)

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

# RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:150534 CAPLUS

DN 138:204946

TI Preparation of N-ureidoalkylpiperidines as modulators of CCR3 chemokine receptor activity for the prevention of asthma and other allergic diseases

IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Kim, Ui Tae; Wacker, Dean A.; Zheng, Changsheng

PA Bristol-Myers Squibb Pharma Company, USA

SO U.S., 126 pp., Cont.-in-part of U.S. Ser. No. 466,442. CODEN: USXXAM

DT Patent

LA English

FAN. CNT 10

FAN.	CNT	10																
	PAT	ENT I	. OI			KINI	) :	DATE		•	APPL:	I CAT	ION 1	10.			ATE	
ΡI	US	6525	 069			В1		2003	0225		US 2	000-	5974	00		20	0000	521
	US	6331	541			В1		2001	1218	•	US 19	999-	4652	88		19	99912	217
	US	6444	686			В1		2002	0903	•	US 19	999-	4664	42		19	9991	217
	ZA	2001	0037	56		Α	,	2002	0509		ZA 2	001-	3756			20	0010	509
	CA	2413	421			AA		2001	1227		CA 2	001-	2413	421		20	0010	620
	. WO	2001098270 2001098270				A2		2001	1227	,	WO 2	001-	US19	752		20	0010	620
	WO	2001	0982	70		А3		2002	0530									
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
								DM,										
			HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
			LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
			SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	ΤZ,	UA,	UG,	UZ,	VN,	ΥU,
								KG,										
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
								GA,										
	EP	1294	690			A2	-	2003	0326		EP 2	001-	9503	60		2	0010	620

		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR						
	JP	2004	5162	38		Т2		2004	0603	,	JP	2002-	5042	26		2	0010	520
	US	2003	0137	41		A1		2003	0116	1	US	2001-	7172			2	0011	023
	US	6521	592			B2		2003	0218									
	US	2003	1144	89		A1		2003	0619		US	2002-	1808	69		2	0020	526
	US	6897	234			В2		2005	0524									
	US	2004	0025	15		<b>A</b> 1	,	2004	0101	1	US	2002-	2794	16		2	0021	024
	US	6875	776			В2		2005	0405									
	US	2004	0061	07		<b>A</b> 1		2004	0108	1	US	2002-	2792	31		2	0021	024
	US	6780	857			В2		2004	0824									
	US	2004	0340	63		<b>A1</b>		2004				2003-					00302	
	US	2005	0963	25		<b>A</b> 1		2005	0505	1	US	2004-	9833	67		2	0041	108
PRAI	US	1998	-112	717P		P		1998	1218									
	US	1999	-161	221P		P		1999	1022									
	· US	1999	-466	442		. A2		1999										
	US	1999	-161	137P		P		1999										
		1999				P		1999										
	US	1999	-161	222P		P		1999										
		1999				<b>A</b> 3		1999										
		1999				<b>A</b> 3		1999										
		1999				<b>A</b> 3		1999										
		2000				P		2000										
		2000				Α		2000										
		2001				W		2001				•						
		2002				A1		2002	0626									
os	MAI	RPAT	138:	2049	46													
GI																		

$$\begin{array}{c|c}
J-M & R4 \\
K & N & E \\
L-Q & | & \\
R^1N & NR^2R^3 \\
Z & I
\end{array}$$

Title compds. [I; M, Q = CH2, CHR5, CHR13, CR13R13, CR5R13; J, K, L = CH2, AΒ CHR5, CHR6, CR6R6, CR5R6;  $\geq 1$  of J, K, L contains R5; Z = O, S, NR1a, CHCN, CHNO2, C(CN)2; R1a = H, alkyl, cycloalkyl, CN, NO2, etc.; E = (substituted) C3-6 carbocyclyl, methylenecarbocyclyl, ethylenecarbocyclyl, etc.; R1, R2 = H, alkyl, alkenyl, alkynyl; R3 = (substituted) alkyl, alkenyl, alkynyl; R4 = null, N-oxide, alkyl, alkenyl, alkynyl, cycloalkylalkyl, etc.; R5 = (substituted) alkylenecarbocyclyl, alkyleneheterocyclyl; R6 = alkyl, alkenyl, alkynyl, alkylcycloalkyl, perfluoroalkyl, hydroxyalkyl, mercaptoalkyl, aminoalkyl, CN, etc.; R13 = alkyl, alkenyl, alkynyl, cycloalkyl, perfluoroalkyl, aminoalkyl, hydroxyalkyl, carboxyalkyl, mercaptoalkyl, acylaminoalkyl, (substituted) phenylalkyl, etc.], were prepared as CCR3 modulators (no data). Thus, 4-benzyl-1-(3-aminopropyl)piperidine (preparation given) and 3-cyanophenyl isocyanate were stirred 30 min. in THF to give N-3-cyanophenyl-N'-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]urea.

IT 275812-98-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-ureidoalkylpiperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

### RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:935575 CAPLUS

DN 136:69739

TI Preparation of piperidinoalkylureas as chemokine receptor modulators

IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Kim, Ui Tae; Wacker, Dean A.; Zheng, Changsheng

PA Dupont Pharmaceuticals Company, USA

SO PCT Int. Appl., 333 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 10

	PA:	<b>TENT</b>	NO.			KIN	D	DATE		1	APPL	ICAT:	ION 1	νо.		D.	ATE	
							_		<b>-</b> -						<del>-</del>	_		
ΡI	WO	2001	0982	70		A2		2001	1227	1	WO 2	001-1	US19	752		2	0010	620
	WO	2001		<b>A</b> 3		2002	0530											
		W: AE, AG, AL				AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GΕ,	GH,	GM,	HR,
			HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,
			LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PL,	PT,	RO,	RU,
		LU, LV, N SD, SE, S				SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,

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ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              US 2000-597400
                                                                       20000621
     US 6525069
                           В1
                                 20030225
                                                                       20010620
                                              CA 2001-2413421
     CA 2413421
                           AA
                                 20011227
                                                                       20010620
                                              EP 2001-950360
                                 20030326
     EP 1294690
                           A2
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                              JP 2002-504226
                                                                       20010620
                           T2
                                 20040603
     JP 2004516238
                                 20000621
PRAI US 2000-213208P
                           Р
     US 2000-597400
                                 20000621
                           Α
     US 1998-112717P
                           Ρ
                                  19981218
                           Ρ
                                  19991022
     US 1999-161221P
     US 1999-466442
                           A2
                                  19991217
     WO 2001-US19752
                           W
                                  20010620
os
     MARPAT 136:69739
     The title compds. were prepared as chemokine receptor modulators (no data).
AΒ
     Thus, PhCH2Z(CH2)3NHR (Z = piperidine-4,1-diyl)(I; R = H)(preparation given)
     was amidated by 3-(NC)C6H4NCO to give I [R = CONHC6H4(CN)-3].
IT
     275812-98-1P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of piperidinoalkylureas as chemokine receptor modulators)
RN
     275812-98-1 CAPLUS
     Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-
CN
     piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,
     mono(trifluoroacetate) (9CI) (CA INDEX NAME)
     CM
          1
          275812-97-0
     CRN
     CMF
          C29 H38 F N3 O
```

Absolute stereochemistry.

CM 2

CRN 76-05-1

CMF C2 H F3 O2

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L3 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 2001:935574 CAPLUS

DN 136:69738

TI Preparation of ureidoalkylpiperidines as modulators of chemokine CCR3 receptor activity.

IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B.; Wacker, Dean A.; Yao, Wenqing

PA Dupont Pharmaceuticals Company, USA; Bristol-Myers Squibb Pharmaceutical Co.

SO PCT Int. Appl., 446 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 10

ran.	PATENT	NO.			KIN	D	DATE			APPL:	ICAT:	ION 1	NO.		D.	ATE	
PI	WO 200 WO 200									WO 2	001-	US19	745		2	0010	620
	W:		CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		LU,	LV,	MA,	MD,	MG,	JP, MK, SL,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
	RW	ZA, GH,	ZW GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	zw,	AM,	AZ,	BY,	KG,
		KZ, MD, RU IE, IT, LU GW, ML, MR JS 6605623				NL,	PT,	SE,									
	US 660 CA 241 EP 136		B1 AA		2003	0812 1227		CA 2	001-	2413	274		2		620		
	R:	AT, IE,	BE, FI,	CH,	DE, TR	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
PRAI	US 200 US 200 US 199	IE, FI, CY JP 2004517803 US 2000-213051P US 2000-598821 US 1998-112717P					2004 2000 2000 1998	0621 0621 1218		JP 2°	002-	5042	25		2	0010	620
os	US 199 US 199 WO 200 MARPAT	9-465 1-US1	286 9745		В2		1999 1999 2001	1217									
GI																	

$$\begin{array}{c|c}
J-M & R^4 \\
K & N & || \\
L-Q & E-N & NR^2R^3
\end{array}$$

AB [Title compds. I; M = CH2, CHR5, CHR13, CR13R13, CR5R13; Q = CH2, CHR5, CHR13, CR13R13, CR5R13; J, L = CH2, CHR5, CHR6, CR6R6, CR5R6; Z = O, S; M = CH2, CHR5, CHR13, CR13R13, CR5R13; K = CHR5, CR5R6; Z = O, S; E = (CHR7)(CHR9)v(CR11R12); R1, R2 = H, alkyl, alkenyl, alkynyl, (substituted) alkylcycloalkyl; R2R3 = atoms to form a (substituted) 5-7 membered ring; R3, R5 = (substituted) (alkyl)cycloalkyl, (alkyl)heterocyclyl; R4 = null, O, alkyl, alkenyl, alkynyl, etc.; R4 with R7, R9, or R11 = atoms to form a

5-7 membered ring; R7, R9 = H; R4R7, R4R9 = (substituted) spirocyclyl; R13 = alkyl, alkenyl, alkynyl, cycloalkyl, etc.; R11R12 = pyrrolidinyl, tetrahydrofuryl, piperidinyl, tetrahydropyranyl; v = 1, 2, were prepared as modulators of chemokine activity (no data). Thus, 4-benzyl-1-(3-aminopropyl)piperidine (preparation given) in THF was treated with 3-cyanophenyl isocyanate to give N-(3-cyanophenyl)-N'-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]urea.

IT 275812-98-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidoalkylpiperidines as modulators of chemokine CCR3 receptor activity)

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

- L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2000:824211 CAPLUS
- DN 134:4764
- TI Preparation of 3-(benzoylamino)propionic acid derivatives as glucagon antagonists/inverse agonists
- IN Ling, Anthony; Plewe, Michael Bruno; Truesdale, Larry Kenneth; Lau, Jesper; Madsen, Peter; Sams, Christian; Behrens, Carsten; Vagner, Josef; Christensen, Inge Thoger; Lundt, Behrend Frederik; Sidelmann, Ulla Grove; Thogersen, Henning

Novo Nordisk A/S, Den.; Agouron Pharmaceuticals, Inc. PA

PCT Int. Appl., 564 pp. so

CODEN: PIXXD2

Patent DTLA English FAN.CNT 1

tw.	PA	CENT I	.00			KIN	D	DATE				ICAT		NO.		Di	ATE	
PI	WO	2000		10		<b>A</b> 1		2000	1123		WO 2	2000-	DK26				0000	
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
												GB,						
												KZ,						
												NZ,						
												UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,
								MD,										
		RW:										UG,						
												MC,				BF,	ВJ,	CF,
			CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		_		
		6503				В1		2000	0516		US 2	-000	5725	53		21	0000	516
		2373				AA		2000	1123		CA 2	2000-	2373	892		21	0000	516
	CA 2373892 AA 200 EP 1183229 A1 200 R: AT, BE, CH, DE, DK, ES																	
		R:							FR,	GB,	GR,	IT,	ъΙ,	LU,	NL,	SE,	MC,	PT,
			•	•	•	LV,	-		0010		<b>DD</b> (		1005	1		2	0000	E 1 C
	BR	2000	0106	51		A						2000-					0000	
	JP	2002	5442	54		12		2002				2000-				_	0011	
		2001						2002	0013		ZA Z	2001-	000U			_	0011	
		2001						2002	1127		NO 2	2001- 2002-	2001	<b>5</b> 1		. 2	0020	
		2003						2005	U40E		05 4	2002-	2330	<b>J</b> 1		4	0020	030
מתם		6875 1999						1999										
PRAI		2000				A		2000										
		1999		/15D		D.												
								2000										
	US 2000-191685P US 2000-572553							2000				-						
		2000						2000										
os		RPAT								•								
GI	1111			1,01														
31																		

$$V^{A}$$
 $Y^{Z}$ 
 $N$ 
 $X^{D}$ 
 $Y^{D}$ 
 $Y^{D}$ 

The title compds. [I; V = CO2R2, CONR2R3, CONR2OR3, etc. (wherein R2, R3 = AB H, alkyl); A = (CH2)n(CR8R9)bNR7, (CR8R9)b(CH2)nNR7, (CR8R9)b(CH2)n, etc. (b = 0-1; n = 0-3; R7 = H, alkyl, (cycloalkyl)alkyl; R8, R9 = H, alkyl); Y= CO, SO2, O, a bond; Z = (un) substituted phenylene, divalent radical derived from 5-6 membered heteroarom. ring containing 1-2 heteroatoms selected from N, O and S; or AYZ together = II; R1 = H, alkyl; X = CO(CR13R14)r(CH2)s, SO2(CR13R14)r(CH2)s, CO2(CR13R14)r(CH2)s, etc. (r = 0-1; s = 0-3; R13, R14 = H, alkyl); D = (un) substituted Ph, pyridyl, cyclopropyl, etc.; E = (un)substituted quinolinyl, 2,5-dioxopiperidinyl, biphenylalkyl, etc.] which act to antagonize the action of the glucagon hormone on the glucagon receptor (data given), and therefore may be suitable for the treatment and/or prevention of any glucagon-mediated conditions and diseases such as hyperglycemia, Type 1 diabetes, Type 2 diabetes and obesity, were prepared and formulated. E.g., a multi-step solid phase synthesis of III was given. Compds. I are effective at 0.05-10 mg/kg/day.

IT 307983-80-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of 3-(benzoylamino)propionic acid derivs. as glucagon antagonists/inverse agonists)

RN 307983-80-8 CAPLUS

CN β-Alanine, N-[4-[[[4-(1,1-dimethylethyl)cyclohexyl][[(2-phenylcyclopropyl)amino]carbonyl]amino]methyl]benzoyl]- (9CI) (CA INDEX NAME)

### RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:420964 CAPLUS

DN 133:43445

TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity

IN Ko, Soo S.; Duncia, John V. K.; Santella, Joseph B., III; Wacker, Dean A.; Kim, Ui Tae

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 351 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 10

	PATI	ENT I	NO.			KIN	D	DATE		i	APPL:	ICAT:	ION I	.OV		D	ATE	
							_											<del>-</del>
ΡI	WO 2	2000	0354	54		A1		2000	0622	1	WO 1	999-1	US30	336		19	99912	217
	W: AL, AU, BR																	
		NO, NZ, PL,				RO,	SG,	SI,	SK,	TR,	UA,	VN,	ZA,	AM,	ΑŻ,	BY,	KG,	KZ,
		MD, RU, TJ				MT												

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 20000622 CA 1999-2348923 19991217 CA 2348923 AΑ EP 1999-965322 19991217 EP 1140087 **A**1 20011010 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO 19991217 US 6331541 B1 20011218 US 1999-465288 US 1999-465287 19991217 US 6492400 В1 20021210 20010509 20020509 ZA 2001-3756 ZA 2001003756 Α 20011023 US 2001-7172 20030116 US 2003013741 **A**1 US 6521592 В2 20030218 US 2002-279416 20021024 20040101 US 2004002515 A1 US 6875776 B2 20050405 US 2002-279231 20021024 US 2004006107 A1 20040108 US 6780857 B2 20040824 PRAI US 1998-112717P Ρ 19981218 Ρ 19991022 US 1999-161184P US 1999-161137P Ρ 19991022 Ρ 19991022 US 1999-161222P 19991217 **A3** US 1999-465287 **A3** 19991217 US 1999-465288 А3 19991217 US 1999-465948 WO 1999-US30336 W 19991217 os MARPAT 133:43445 GΙ

$$\begin{array}{c|c}
J-M & R^4 & \parallel \\
K & N-E-N & N-R^3 \\
L-Q & R^1 & R^2
\end{array}$$

The title compds. [I; M = absent, CH2, CH(CH2Ph), etc.; Q = CH2, CHR5, etc.; J, K, L = CH2, CH(CH2Ph), etc.; Z = O, S; E = (CH2)2, (CH2)3, CH2CH(OH)CH(Ph), etc.; R1, R2 = H, alkyl, alkenyl, etc.; R2 and R3 may join to form (un)substituted 5-7 membered ring; R3 = (un)substituted Ph, naphthyl, adamantyl, etc.; R4 = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/da (oral dosage).

IT 275812-98-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,

mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM · 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:420963 CAPLUS

DN 133:43444

TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity

IN Ko, Soo; Clark, Cheryl Mcardle; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III; Wacker, Dean A.

PA Du Pont Pharmaceuticals Co., USA

SO PCT Int. Appl., 316 pp.

CODEN: PIXXD2

DT Patent

LA English

EAN CNT 10

FAN.		TENT	NO.			KINI	D	DATE		i	APPL:	ICAT:	ION I	NO.		Dž	ATE	
PI	WO	2000	0354	53		A1	_	2000	0622	,	WO 1	999-1	JS30:	335		19	9991	217
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								SI,										
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		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,	SE														
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AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO 19991217 20011218 US 1999-465288 US 6331541 В1 19991217 US 6486180 B1 20021126 US 1999-465948 ZA 2001003756 20020509 ZA 2001-3756 20010509 Α US 2003013741 A1 20030116 US 2001-7172 20011023 US 6521592 B2 20030218 US 2002-279416 20021024 US 2004002515 Α1 20040101 20050405 US 6875776 B2 US 2002-279231 20021024 20040108 US 2004006107 A1 US 6780857 B2 20040824 PRAI US 1998-112717P Ρ 19981218 US 1999-161137P Р 19991022 Ρ 19991022 US 1999-161184P Ρ 19991022 US 1999-161222P US 1999-465287 **A3** 19991217 US 1999-465288 Α3 19991217 **A3** 19991217 US 1999-465948 W 19991217 WO 1999-US30335 os MARPAT 133:43444 GI

The title compds. [I; M = absent, CH2, CH(CH2Ph), etc.; Q = CH2, CH(CH2Ph), etc.; J, K, L = CH2, CH(CH2Ph), etc.; Z = O, S; E = (CH2)2, (CH2)3, CH2CH(OH)CH(Ph), etc.; R1, R2 = H, alkyl, alkenyl, etc.; R2 and R3 may join to form (un)substituted 5-7 membered ring; R3 = (un)substituted Ph, naphthyl, adamantyl, etc.; R4 = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).

IT 275812-98-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

### Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

### RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:420962 CAPLUS

DN 133:43443

 ${\tt TI}$  Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity

IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Kim, Ui Tae; Santella, Joseph B. Iii; Wacker, Dean A. K.

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 388 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 10

PAN.	N.CNT IU																	
	PATENT NO.						KIND DATE				APPL:	ICAT:	DATE					
ΡI	WO 2000035452				Δ1 20000622					wo 1	 999-1		19991217					
	"							CZ,										
			NO,	NZ,	PL,	RO,	SG,	SI,	SK,	TR,	UA,	VN,	ZA,	AM,	ΑZ,	BY,	KG,	ΚZ,
				RU,	•													
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		511394	A	20030725		1999-511394	19991217
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		2001003730	A	20010820		2001-2977	20010615
		2003013741	A1	20030116		2001-7172	20011023
		6521592	B2	20030218			
		2004002515	A1	20040101	US	2002-279416	20021024
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		2004006107	A1	20040108	US	2002-279231	20021024
		6780857	B2	20040824			
		2005096325	A1	20050505	US	2004-983367	20041108
PRAI		1998-112717P	P	19981218			
	US	1999-161221P	P	19991022			
	US	1999-161137P	P	19991022		·	
	US	1999-161184P	P	19991022			
	US	1999-161222P	P	19991022			
	US	1999-465287	A3	19991217			
	US	1999-465288	A3	19991217			
	US	1999-465948	A3	19991217			
	US	1999-466442	A3	19991217			
	WO	1999-US30334	W	19991217			
	ŲS	2002-180869	A1	20020626			
os	MA	RPAT 133:43443					
GI							

The title compds. [I; M = absent, CH2, CH(CH2Ph), etc.; Q = CH2, CH(CH2Ph), etc.; J, K, L = CH2, CH(CH2Ph), etc.; Z = O, S; E = (CH2)2, (CH2)3, CH2CH(OH)CH(Ph), etc.; R1, R2 = H, alkyl, alkenyl, etc.; R2 and R3 may join to form (un)substituted 5-7 membered ring; R3 = (un)substituted Ph, naphthyl, adamantyl, etc.; R4 = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).

IT 275812-97-0P 275812-98-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

RN 275812-97-0 CAPLUS

CN Urea, N-[(1R, 2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-

piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN AN 2000:420961 CAPLUS

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133:43442
DN
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Preparation of N-ureidoalkyl-piperidines as modulators of chemokine ΤI receptor activity

Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III; IN Wacker, Dean A.; Watson, Paul S.; Varnes, Jeffrey G.

Du Pont Pharmaceuticals Company, USA PA

SO PCT Int. Appl., 394 pp. CODEN: PIXXD2

Patent DT

English LA

GI.

FAN.	CNT	10																	
PATENT NO.																			
ΡI	I WO 2000035451																9991	217	
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				RU,															
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			PT,																
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	ΕP	1140																	
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						LV,											-	0001	017
	US	6331 2001	541			B1		2001	1218		US	199	99-4	4652	88		Τ.	9991	21 <i>1</i>
	ZA	2001	0037	56		A		2002	0509		ZA	200	)1	3/56			2	0011	209
	US	2003	0137	41		Al		2003	0116		US	200	)I-	1112			2	OOLI	023
	US	6521 2004	592	a c		B2		2003	0218		110	200		2704	16		2	0021	024
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		6875				B2					110	200	12_1	2702	21		2	0021	024
	US	2004 6780	0001	0 /		A1		2004	0100		0.5	200	12-1	2132	31		2	0021	024
דאממ		1998		717p		DZ D		1009	1218										
PRAI	116	1999	-112	2/3D		D D	•	1990	1022										
	116	1999	-161	137p		Þ		1999	1022										
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	WO	1999	-US3	0332		W		1999	1217										
os		RPAT																	
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II

The title compds. [I; M = absent, CH2, CH(CH2Ph), etc.; Q = CH2, CH(CH2Ph), etc.; J, K, L = CH2, CH(CH2Ph), etc.; Z = O, S; E = (CH2)2, (CH2)3, CH2CH(OH)CH(Ph), etc.; R1, R2 = H, alkyl, alkenyl, etc.; R2 and R3 may join to form (un)substituted 5-7 membered ring; R3 = (un)substituted Ph, naphthyl, adamantyl, etc.; R4 = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).

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mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2000:420959 CAPLUS
- DN 133:43441
- TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity
- IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III;

Gardner, Daniel S.

Du Pont Pharmaceuticals Company, USA PΑ

PCT Int. Appl., 327 pp. CODEN: PIXXD2
Patent
English so

DTLA

FAN.CNT 10

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			NO,	NZ,	PL,	RO,	SG,	SI,	SK,	TR,	UΑ	١,	VN,	ZA,	AM,	ΑZ,	BY,	KG,	ΚZ,
			MD,	RU,	ТJ,	TM													
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PRAI	US	1999	-161	137P		P		1999	1022										
						P													
		1999				P		1999											
		1999				A3		1999											
	US	1999	-465	288		A3		1999											
		1999				A3		1999					•						
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		1999						1999											
0.5		2002				ΑI		2002	0026										
os	MA.	RPAT	133:	4344	Т														
GI																			

AB The title compds. [I; M = absent, CH2, CH(CH2Ph), etc.; Q = CH2, CHR5, etc.; J, K, L = CH2, CH(CH2Ph), etc.; Z = 0, S; E = (CH2)2, (CH2)3, CH2CH(OH)CH(Ph), etc.; R1, R2 = H, alkyl, alkenyl, etc.; R2 and R3 may join to form (un)substituted 5-7 membered ring; R3 = (un)substituted Ph, naphthyl, adamantyl, etc.; R4 = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at  $1.0-20 \, \text{mg/kg/day}$  (oral dosage).

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CM 1

CRN 275812-97-0 CMF C29 H38 F N3 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1972:84961 CAPLUS

DN 76:84961

TI Synthesis of isonitriles

AU Walborsky, H. M.; Niznik, G. E.

CS Dep. Chem., Florida State Univ., Tallahassee, FL, USA

SO Journal of Organic Chemistry (1972), 37(2), 187-90 CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

OS CASREACT 76:84961

AB A synthesis of iso-nitriles was devised using a DMF solution of chlorodimethylfor-miminium chloride, prepared in situ from SOC12 and DMF, to dehydrate formamides. This procedure is applicable in the preparation of aliphatic, alicyclic, vinylic, and aromatic isonitriles. The reduction of isocyanates with LiAlH(OBu-tert)3 to formamides was described.

IT 32529-00-3P

RN 32529-00-3 CAPLUS

CN Urea, N-formyl-N,N'-bis(1-methyl-2,2-diphenylcyclopropyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1966:468519 CAPLUS

DN 65:68519

OREF 65:12792c-e

TI Cytokinin activity of some substituted ureas and thioureas

AU Bruce, M. I.; Zwar, J. A.

CS Div. Plant Ind., C.S.I.R.O., Canberra, Australia

SO Proc. Roy. Soc. (London), Ser. B. (1966), 165(999), 245-65

DT Journal

LA English

N, N'-Diphenylurea had reproducible cytokinin activity. N-Monosubstituted AB and N,N'-disubstituted ureas (500) were examined, and .apprx.250 were active. The following generalizations were made with regard to the correlation of chemical structure with biol. activity: (1) phenylurea was the simplest active compound; (2) an HNCONH bridge conferred higher activity than an HNCSNH bridge; (3) compds. in which both amino H atoms on 1 or both sides of the bridge were substituted were of low activity or were inactive; (4) ring substitution on the bridge (RNHCONH2, R = substituted phenyl ring) increased the activity, and meta substitutions gave highest activity, while ortho substitutions gave lowest activity; (5) compds. with electron-attracting substituents were more active than those with electron-donating substituents; (6) pyridyl compds. were active, but compds. with non-planar rings were inactive; and (7) in compds. of the type RNHCONHR', where R and R' were phenyl or substituted phenyl groups, compds. having 1 unsubstituted phenyl ring had higher activities than those having 2 substituted phenyl groups. Some ureas showed detectable activity at 0.1 ppm., which was .apprx.4-fold less active than kinetin in the tobacco pith assay.

IT 13201-82-6, Urea, 1,3-bis(2-phenylcyclopropyl)-, trans, trans-(plant regulator activity of)

RN 13201-82-6 CAPLUS

CN Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans- (8CI) (CA INDEX NAME)

L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1966:468518 CAPLUS

DN 65:68518

OREF 65:12792b-c

TI Effect of gibberellic acid on growth of woody ground-cover plants

AU Kemmerer, Harleigh; Butler, J. D.

CS Univ. of Illinois, Urbana

SO Proceedings of the American Society for Horticultural Science (1966), 88, 698-702

CODEN: PASHA6; ISSN: 0099-4065

DT Journal

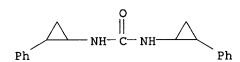
LA English

AB Two-year-old plants of Euonymus fortunei coloratus, Vinca minor, Celastrus scandens, and Juniperus horizontalis plumosa were sprayed with gibberellic acid at 1 application of 100 and 1000 ppm., and 100 ppm. weekly, over 3 months. Some of the treatments stimulated shoot production. Treated V. minor developed chlorosis that could not be overcome with addnl. fertilizer or chelated Fe. The chlorotic foliage eventually died. Juniper plants also were injured by the sprays.

IT 13201-82-6, Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans-(plant regulator activity of)

RN 13201-82-6 CAPLUS

CN Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans- (8CI) (CA INDEX NAME)



VPA 17-2/1/6 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

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100.0% PROCESSED 122999 ITERATIONS

5 ANSWERS

SEARCH TIME: 00.00.06

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COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 163.48 163.69

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:11:45 ON 29 JUN 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 29 Jun 2005 VOL 143 ISS 1 FILE LAST UPDATED: 28 Jun 2005 (20050628/ED)

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This file contains CAS Registry Numbers for easy and accurate

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substance identification.
=> s 17
               5 L7
L8
=> d bib abs hitstr 1-5
      ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
L8
AN
      2004:1127328 CAPLUS
DN
      142:74457
ΤI
      Preparation of ureidocyclohexylmethylpiperidines as modulators of
      chemokine receptor activity.
IN
      Delucca, George V.; Ko, Soo S.
      Bristol-Myers Squibb Company, USA
PΑ
SO
      PCT Int. Appl., 140 pp.
      CODEN: PIXXD2
DT
      Patent
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                                                     APPLICATION NO.
                                                                                 DATE
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               SN, TD, TG
PRAI US 2003-478022P
                               Ρ
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MARPAT 142:74457

OS

GΙ

AB Title compds. [I; R1 = alkyl, (substituted) carbocyclyl(alkyl), heterocyclyl(alkyl); R2 = N(R4a)2, NR4fCHO, NR4fCO2R4b, NR4fCO(CHR')rR4b, etc.; R4a = H, alkyl, alkenyl, alkynyl, (substituted) carbocyclyl(alkyl),

Ι

heterocyclyl(alkyl); (R4a)2, R4bR4f = atoms to form a 5-7 membered (substituted) heterocyclyl; R4b = alkyl, alkenyl, alkynyl, perfluoroalkyl, (substituted) carbocyclyl(alkyl), heterocyclyl(alkyl); R4f = H, alkyl, cycloalkyl, Ph; r = 0-5], were prepared as e.g. CCR-1 and CCR-3 chemokine receptor inhibitors (no data). Thus, title compound (II) was prepared in many steps from 1,4-cyclohexanedione monoethylene ketal, (S)-3-(4-fluorobenzyl)piperidine, methylamine, Ac2O, 2-amino-4-methylthiazole, and Ph chloroformate.

#### IT 813443-85-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidocyclohexylmethylpiperidines as modulators of chemokine receptor activity)

RN 813443-85-5 CAPLUS

CN Urea, N-cyclohexyl-N'-[(1R,2S,4R)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]-4-(4-morpholinyl)cyclohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 2004:1127098 CAPLUS

DN . 142:74455

TI Preparation of ureidocyclohexylmethyl(fluorobenzyl)piperidines as modulators of chemokine receptor activity.

IN Ko, Soo S.; Delucca, George V.

PA USA

SO U.S. Pat. Appl. Publ., 45 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

PAN.CNI Z								
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
PI US 2004259914	A1	20041223	US 2004-865417	20040610				
PRAI US 2003-478022P	P	20030612						
OS MARPAT 142:74455								
GT								

AB Title compds. [I; R1 = alkyl, (substituted) carbocyclyl(alkyl), heterocyclyl(alkyl); R2 = (substituted) amino, acylamino], were prepared as CCR1 and CCR3 inhibitors (no data). Thus, N-(1S,2R,5R)-[4-[3-(4-fluorobenzyl)piperidin-1-ylmethyl]-3-[3-(4-methylthiazol-2-yl)ureido]cyclohexyl]-N-methylacetamide was prepared in many steps from 3-ethoxy-2-cyclohexenone, di-Et carbonate, (S)-3-(4-fluorobenzyl)piperidine mandelate salt, methylamine, and (4-methylthiazol-2-yl)carbamic acid Ph ester.

Ι

IT 813443-85-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidocyclohexylmethylpiperidines as modulators of chemokine receptor activity)

RN 813443-85-5 CAPLUS

CN Urea, N-cyclohexyl-N'-[(1R,2S,4R)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]-4-(4-morpholinyl)cyclohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2001:472724 CAPLUS
- DN 135:76865
- TI Preparation of N-(isoxazoloquinolinylcyclohexyl)carboxamides and analogs as MRP1 inhibitors
- IN Bonjouklian, Rosanne; Cohen, Jeffrey Daniel; Gruber, Joseph Michael; Johnson, Douglas Webb; Jungheim, Louis Nickolaus; Kroin, Julian Stanley; Lander, Peter Ambrose; Lin, Ho-shen; Lohman, Mark Christopher; Muehl, Brian Stephen; Norman, Bryan Hurst; Patel, Vinod Francis; Richett, Michael Enrico; Thrasher, Kenneth Jeff; Vepachedu, Sreenivasarao; White, Wesley

Todd; Xie, Yongping; York, Jeremy Schulenburg; Parkhurst, Brandon Lee PA Eli Lilly and Co., USA; Wang, Qiuping; et al.

SO PCT Int. Appl., 381 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 1

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AB Title compds. were prepared as MRP1 inhibitors (no data). Thus, mono-N-protected cyclohexane-1,3-diamine was amidated by 3-(2-chloro-6-fluorophenyl)--5-methylisoxazole-4-carbonyl chloride and the cis-product cyclized to give, after deprotection and amidation, title compound I.

#### IT 347183-19-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of N-isoxazoloquinolinylcyclohexylcarboxamides and analogs as

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MRP1 inhibitors)
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RN 347183-19-1 CAPLUS

CN Urea, N-[(1R,3S)-3-(9-chloro-3-methyl-4-oxoisoxazolo[4,3-c]quinolin-5(4H)-yl)cyclohexyl]-N'-cyclohexyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1965:462817 CAPLUS

DN 63:62817

OREF 63:11461b-h,11462a-b

TI Aryltetralins

IN Rutschmann, Juerg; Schreier, Emil

PA Sandoz Ltd.

SO 32 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI	FR M3101		19650310	FR				
	GB 1046234			GB				
PRAI	CH		19620830		•			

GI For diagram(s), see printed CA Issue.

I (R' = CO2Me) (20 g.) is hydrogenated at room temperature on a 10% Pd charcoal catalyst in 300 ml. AcOH to give II (R' = CO2Me), m. 157-8°. II (R' = CO2Et), is obtained by the same procedure. A suspension of 10 g. II (R' = CO2Me) [or II (R' = CO2Et)] is refluxed in 25ml. anhydrous NH2NH2 at 130° for 4 hrs. to give 7.4 g. II (R' = CONHNH2), m. 188-9°. II (R' = CONHNH2) (4 g.) is dissolved in a mixture of 15 ml. 2N HCl and 25 ml. AcOH. The mixture is diazotized and the crude azide is refluxed for 2 hrs. in a mixture of 20 ml. toluene and 5 ml. benzyl alc. to give the corresponding benzyl urethan, m. 182-3°. This compound is treated with H on a Pd-charcoal catalyst in AcOH to give II (R' = NH2), m. 152-3°; HCl salt m. 274-5°. II (R = NH2) (5 g.) is left

overnight at room temperature in a mixture of 50 ml. MeOH and 5 ml. ethylene oxide

and the solution is further heated at 60° for 2 hrs. to give II [R' = N(CH2CH2OH)2], m. 208-9°, which is heated at 60° for 1 hr. with 5 ml. SOCl2 in 50 ml. CH2Cl2 while stirring to give crude II [R' = N(CH2CH2Cl)2].HCl, which is converted into the free base, m. 140-1°; HCl salt m. 208-9°. Similarly are prepared the following compds. (R' and m.p. given): III: CO2Et, 110-11°; CONHNH2, 178-9°; benzylurethan, 178-9°; methyl urethan, 190-1°; NH2, 109-11° (HCl salt m. 278-80°);

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N(CH2CH2OH)2, 86-7°; N(CH2CH2Cl)2, 123-4° (HCl salt m.
     210-12°); IV: CONHNH2, 158-9°; benzyl urethan,
     147-8°; NH2.HCl, 252-3°; N(CH2CH2OH)2, 95-6°;
     N(CH2CH2Cl)2.HCl, m. 166°; V: CO2Me, 146-7°; VI: CO2Me,
    98-100°; CONHNH2, 178-80°; benzyl urethan, 175-6°; NH2, 151-2° (HCl salt m. 273-4°); N(CH2CH2OH)2,
     114-15°; N(CH2CH2Cl)2, 113-14° (HCl salt m. 195-7°);
     VII: CO2Me, 72-3°; CONHNH2, 150-1°; benzyl urethan,
     119-20°; NH2, 67-8° (HCl salt 280-1°); N(CH2CH2OH)2,
     134-5°; N(CH2CH2Cl)2, 80-1°; VIII: CO2Me, 119-20°.
     Compound, X, R2, R3, R4, R5, R6, R7; I, CO, H, --OCH2O--, MeO, MeO, MeO, II,
     CH2, H, --OCH2O--, MeO, MeO, MeO; III, CH2, H, MeO, MeO, MeO, MeO, MeO;
     IV, CH2, MeO, MeO, MeO, MeO, MeO, H; V, CO, H, MeO, MeO, MeO, MeO, H; VI,
     CH2, H, MeO, MeO, MeO, MeO, H; VII, CH2, H, H, H, H, H, H; VIII, CO, H, H,
     H, H, H, H; Diazotization of III (R' = CONHNH2) gives a product, m.
     255-6, putative bis[1-(3,4,5trimethoxyphenyl)-6,7- dimethoxy-2-
     tetralyl]urea. Preparation of the corresponding hydrochloride gives a compound
     identical to III (R' = NH2)-HCl. K (36 g.) is dissolved in 500 ml.
     tertBuOH (IX) by refluxing 3-4 hrs. under dry N. Then a hot solution of 198
     g. 3,4,3',4',5'-pentamethoxybenzophenone and 156 ml. (CH2CO2Et)2 in 300
     ml. IX is added and the mixture refluxed for 2 hrs. while stirring. The
     solution is neutralized with 300 ml. 2N HCl and IX is evaporated under reduced
     pressure. The acidified solution (Congo red) is extracted with ether and the
     ethereal solution further extracted with 2N aqueous NaOH. This caustic
solution is
     refluxed overnight and 500 ml. CHCl3 is then added. The mixture is
     acidified with concentrate HCl to Congo red while shaking. The solution is
further
     extracted with CHCl3 to give the Stobbe acid, m. 172-5°.
     3,3,3',4',5'-Pentamethoxybenzhydrylidenesuccinic acid (100 q.) is
     hydrogenated at ambient temperature in 1 1. alcohol over 4 g. Pd/C catalyst.
     After the absorption of 5.9 1. H the catalyst is filtered off and the
     crude dihydro Stobbe acid (100 g.) is collected. Crude
     3,4,3',4',5'-pentamethoxybenzhydrylsuccinic acid ( 100 g.) is refluxed in
     AcCl 2 hrs. Evaporation to dryness leaves a solid which is treated with
     benzene. The benzene solution is neutralized with a KHCO3 solution and washed.
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3,3,3',4',5'-Pentamethoxybenzhydrylidenesuccinic acid (100 g.) is hydrogenated at ambient temperature in 1 l. alcohol over 4 g. Pd/C catalyst. After the absorption of 5.9 l. H the catalyst is filtered off and the crude dihydro Stobbe acid (100 g.) is collected. Crude 3,4,3',4',5'-pentamethoxybenzhydrylsuccinic acid (100 g.) is refluxed in AcCl 2 hrs. Evaporation to dryness leaves a solid which is treated with benzene. The benzene solution is neutralized with a KHCO3 solution and washed After evaporation of the solvent, the crude anhydride (95 g.) is dissolved in 300 ml. nitrobenzene (X). To the ice cooled solution is added 60 ml. SnCl4 in 100 ml. X and the mixture stirred overnight at room temperature to give 1-(3,4,5-trimethoxyphenyl)-4-oxo-6,7-dimethoxytetralin-2-carboxylic acid (XI), m. 242-3° (MeOH, EtOH). The mother liquor is evaporated under reduced pressure and the residue is treated with AcOEt to give 1-(3,4-dimethoxyphenyl)-4-oxo-5,6,7-trimethoxytetralin2-carboxylic acid (XII), m. 173-4°. In 300 ml. MeOH and 15 ml. concentrated H2SO4, 25 g. XI is refluxed overnight while stirring to give the Me ester (XIII), m. 171-2°. The Et ester m. 144-5° (alc.). The Et ester (XIV) of XH is obtained by the same procedure, m. 132-3°. Catalytic hydrogenation of XIII gives III (R' = CO2Et), while IV (R' = CO2Et) (b0.001 170°) is obtained from XIV. These new compds. are efficient cytostatic and antimitotic agents. They show low toxicity, even after long applications. They can be used in the treatment of some types of leukemias.

RN 3438-07-1 CAPLUS

CN Urea, 1,3-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2-naphthyl]- (7CI, 8CI) (CA INDEX NAME)

L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1964:30712 CAPLUS

DN 60:30712

OREF 60:5408h,5409a-h,5410a-h,5411a-q

TI Natural products inhibiting mitosis. XIV. Synthetic acid hydrazides and nitrogen mustard compounds of the podophyllotoxin series

AU Schreier, E.

CS Sandoz Ltd., Basel, Switz.

SO Helvetica Chimica Acta (1963), 46(7), 2940-65 CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

OS CASREACT 60:30712

GI For diagram(s), see printed CA Issue.

AB cf. CA 59, 11368a. The podophyllotoxin mol. (I) was modified to secure compds. with an improved antimitotic activity-toxicity ratio and with cytostatic activity. One derivative of this type is II, which has recently been introduced into therapeutics under the designation SP-I SANDOZ. synthesis was now reported of hydrazides of 1,2-trans-1-aryl- and -1-aryl-4-hydroxytetralin-2-carboxylic acids containing alkoxy groups in various positions of the aromatic rings, as well as several nitrogen mustard compds., all being 1,2-trans-compds. instead of the cis variety in the natural series. 1-Phenyl-4-tetralone-2-carboxylic acid (III) (100 g.) suspended in 1 l. MeOH and 100 ml. concentrated H2SO4, and the mixture refluxed and stirred overnight and cooled several hrs. gave 96 g. Me ester (IV) of III, m. 119-20°, IV (50 g.) in 500 ml. AcOH hydrogenated over 6 g. 10% Pd-C at room temperature and atmospheric pressure (vibromixer) gave 44 g. 1-phenyltetralin-2-carboxylic acid Me ester, b0.01 130°, m. 72-3°. 1-(3,4-Dimethoxyphenyl)-4-oxo-6,7-dimethoxytetralin-2carboxylic acid (V) (60 g.) suspended in 600 ml. MeOH and 60 ml. concentrated H2SO4 and the mixture refluxed and stirred 8 hrs. and cooled several hrs. gave 56 g. Me ester (VI) of V, m. 146-7°. VI (50 g.) in 500 ml. AcOH hydrogenated over 5 g. 10% Pd-C as above gave 1-(3,4-dimethoxyphenyl)-6,7-dimethoxytetralin-2-carboxylic acid Me ester, m. 88-90° (MeOH). Catalytic reduction of 1-(3,4-dimethoxyphenyl)-4-oxo-5,6,7-trimethoxytetralin-2-carboxylic acid (VIa) Me ester gave 94% 1-(3,4-dimethoxyphenyl)-5,6,7trimethoxytetralin-2-carboxylic acid Me ester, b0.001 170-5°, viscous oil. By the procedure of S. (loc. cit.) were prepared 1-(3,4,5-trimethoxyphenyl-6,7-dimethoxytetralin-2-carboxylic acid Me ester (VII) and the 6,7-methylenedioxy analog (VIII) of VII. VIII (10 q.) suspended in 25 ml. anhydrous N2H4 and the mixture refluxed 4 hrs., cooled, and diluted with EtOH gave 7.5IX (R = H, (R1R2 =) CH2O2,R3 = R4 = R5 = OMe) (X), m. 188-9° (decomposition) (EtOH). The following IX were similarly prepared (R, R1, R2, R3, R4, R5, m.p. given): H, H, H, H, H, H, 148-9° (EtOH); H, MeO, MeO, H, MeO, MeO, 179-80° (decomposition) (EtOH); MeO, MeO, MeO, H, MeO, MeO, 158-9° (EtOH-H2O); H, MeO, MeO; MeO, MeO, MeO (Xa),. 178-9° (decomposition) (CHCl3-EtOH). X (5 g.) suspended in 75 ml. MeOH containing 2.5 ml. AcH and the mixture refluxed 15 min.

and cooled several hrs. gave 4.53 g. XI [RR' =) ethylidene] (XII), m.

198-9° (CH2Cl2-MeOH). The following XI were similarly prepared (RR' and m.p. given): dodecylidene, 142-3° (MeOH); isopropylidene, 205-6° (MeOH); benzylidene 222-3° (MeOH). XII (1 g.) dissolved in 50 ml. EtOH by heating, the solution cooled to room temperature, treated with 1 g. NaBH4 in 10 ml. H2O, stirred overnight at room temperature, and worked up gave 0.94 g. XI (R = H, R' = Et) (XIII), m. 199-200° (EtOH). Reduction of XII with LiAlH4 in tetrahydrofuran (THF) or by hydrogenation over Pd-C or Raney Ni in EtOH gave less pure XIII in poorer yields. Similarly was prepared XI (R = H, R' = dodecyl), m. 143-4° (EtOH). X (1 g.), 0.4 ml. PhCH2Cl, and 0.5 g. CaCO3 in 20 ml. MeOH refluxed 2.5 hrs. and worked up gave 155 mg. XI (R = H, R' = CH2Ph), m. 181-2° (EtOH), CH2Cl2-EtOH). X (1 g.), 0.8 ml. PhCH2Cl, and 0.5 g. CaCO3 in 20 ml. MeOH refluxed 24 hrs. and worked up gave 260 mg. XI (R =R' = CH2Ph), m. 156-7° (EtOH). X (1 g.) in 25 ml. EtOH and 5 ml. EtOAc refluxed 2 hrs. with freshly prepared Raney Ni (from 2.5 q. alloy) and worked up gave 810 mg. 2-carboxamide analog of X, m. 211-12° (EtOAc-Et20, EtOAc). 1 - (3,4,5- Trimethoxyphenyl) - 4- oxo- 5,7methylenedioxytetralin-2-carboxylic acid (XIV) (8 g.) dissolved in 160 ml. H2O with 12 ml. 2N NaOH with stirring, the solution treated dropwise with 4 g. NaBH4 in 40 ml. H2O under ice cooling, kept overnight at room temperature, and worked up gave 7.5 g. 4-OH analog (XV) of XIV, m. 205-6° (decomposition) (MeOH-EtOAc, Me2COMeOH); from the work up mother liquor was isolated a product, m. 184-6° (decomposition), which was separated by fractional crystallization into XV and an epimer of XV, m. 178-82°. XV (500 mg.) suspended in 100 ml. N H2SO4 refluxed and stirred 2 hrs., cooled to room temperature, and the precipitate (470 mg.) crystallized from CH2Cl2-Et2O gave 350 mg. 1-(3,4,5-trimethoxyphenyl)-6,7-methylenedioxy-1,2-dihydro-2-naphthoic acid (XVI), m. 181-2° (MeOH). XV (500 mg.) in 5 ml. AcOH refluxed 4

hrs. and worked up gave 360 mg. XVI, m. 180-1° (Et20, CH2Cl2-Et20) XV (300 mg.) heated 15 min. at 250° and distilled in vacuo gave 250 mg. XVI, b0.001 220°, m. 179-80° (Et20-petr. ether, Et20). Me ester (XVII) of XVI (via Et2O-CH2N2) m. 138-9° (MeOH). XV (1 g.) with Et20-CH2N2 gave 905 mg. Me ester (XVIII) of XV, m. 180-1° (MeOH). XVIII (1 g.) suspended in 20 ml. N NaOH and the mixture refluxed and stirred 3 hrs. and worked up gave 730 mg. XV, m. 201-2° (decomposition) (EtOH, Me2CO). XVIII (250 mg.) kept 20 hrs. at room temperature in 2 ml. pyridine with 1 ml. Ac20 and the solution evaporated in vacuo gave the O-Ac derivative of XVIII, m. 178-9° (MeOH). 4-Oxo derivative of VIII (20 g.) in 400 ml. THF and 200 ml. MeOH treated portionwise with 20 g. NaBH4 with stirring and ice cooling, stirred 2 hrs. at 0-5°, treated dropwise with 280 ml. 2N HCl, and worked up gave 13.25 g. XVIII, m. 180-1° (MeOH); the MeOH mother liquor evaporated in vacuo and the residue (7 g.) chromatographed on silica gel with C6H6 gave XVII and 1.55 g. XIX, m. 218-19° (MeOH, CH2Cl2-MeOH); further elution with CH2Cl2 gave both C-4 epimers of 1-(3,4,5-trimethoxyphenyl) - 4 - methoxy - 6,7 methylenedioxytetralin -2-carboxylic acid Me ester (XX); the lower melting isomer (XXI) of XX m. 149-50° (MeOH), and the higher melting isomer (XXII) of XX m. 160-1° (EtOH). XVIII (1 g.) suspended in 30 ml. MeOH containing 3 drops concentrated H2SO4 and the mixture refluxed 2.5 hrs.

and

worked up gave 420 mg. XXI, m. 150-1° (MeOH); from the MeOH mother liquor were obtained 105 mg. XVII and 45 mg. XXII. XV (2 g.) in 10 ml. pyridine and 5 ml. Ac2O kept 4 hrs. at room temperature and worked up gave 1.4 g. XVγ-lactone (XXIII), m. 196-7° (MeOH). Heating XV with Ac2O gave 40% XXIII. XV (4.02 g.) in 50 ml. dioxane stirred 2 hrs. at room temperature with 2.1 g. dicyclohexylcarbodiimide (DCC) and worked up gave 3.15 g. XXIII, m. 196-7° (MeOH, CH2Cl2-MeOH). 1-(3,4,5-Trimethoxyphenyl)-4-oxo-6,7-dimethoxytetralin- 2-carboxylic acid (XXIV) (S., loc. cit.) (4.16 g.) in 150 ml. H2O containing 6 ml. 2N NaOH treated with 2 g. NaBH4 in 50 ml. H2O 6 hrs. at room temperature and worked up gave 2.76 g. 4-OH analog (XXV) of XXIV, m. 181-2° (decomposition) (Me2CO); Me ester (via Et2OCH2N2) m. 157-8° (MeOH); O-Ac derivative (with Ac2O-pyridine)

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refluxed 2 hrs. and evaporated in vacuo gave 620 mg. XXV \gamma-lactone
     (XXVI), m. 158-9° (MeOH). XXV (1.66 g.) in 25 ml. dioxane treated
     with 0.83 g. DCC in 5 ml. dioxane 2 hrs. at room temperature and worked up gave
     1.29 g. XXVI, m. 159-60° (MeOH). VIa (4.16 g.) in 150 ml. H20
     containing 6 ml. 2N NaOH treated with 2 g. NaBH4 in 50 ml. H2O 6 hrs at room
     temperature, worked up, the product refluxed 1 hr. with 25 ml. Ac20, and the
     solution evaporated in vacuo gave 2.1 g. \gamma-lactone of 4-OH analog of VIa,
     m. 152-3° (Et2O, CH2Cl2-Et2O, MeOH). XVIII (10 g.), 100 ml. MeOH,
     and 20 ml. anhydrous N2H4 refluxed 1 hr. and cooled gave 8.4 g. XXVII (R =
     NH2, R1 = H, (R2R3 = ) CH2O2, R4 = R5 = R6 = MeO) (XXVIII), m.
     232-3° (decomposition) (EtOH). XXIII (1 g.), 25 ml. MeOH, and 2 ml.
     anhydrous N2H4 refluxed 1 hr. and cooled gave 0.8 g. XXVIII. Similarly were
     prepared XXVII (R = NH2, R1 = R2 = R3: R5 = R6 = MeO, R4 = H), m.
     192-3° (decomposition) (MeOH), and XXVII (R = NH2, R1 = H, R2 = R3 = R4
     = R5 = R6 = MeO), 229-30^{\circ} (decomposition) (EtOH-H2O). XXVIII (1 g.),
     15 ml. MeOH, and 0.5 ml. AcOH refluxed 15 min. and cooled gave 985 mg.
     XXVII (R = N:CHMe, R1 = H, (R2F3 =) CH2O2, R4 = R5 = R6 = MeO) (XXIX), m.
     200-2^{\circ} (decomposition) (MeOH). From XXIII were similarly prepared the
     following alkylidene derivs. (alkylidene group and m.p. given):
     dodecylidene, 174-5° (decomposition) (EtOH); isopropylidene,
     212-13° (MeOH); benzylidene, 214-15° (EtOH). XXIX (1 g.) in
     50 ml. 90% EtOH stirred 2 hrs. at room temperature with 1 g. NaBH4 and worked
     gave 860 mg. ethylhydrazide analog of XXIX, m. 221-2° (decomposition)
     (MeOH, CHCl3-MeOH). To 4.16 g. Xa in 15 ml. 2N HCl and 2N cc. AcOH, 10
     ml. N NaNO2 was added dropwise with cooling; after 10 min. the solution was
     poured on 200 g. ice and worked up, and the crude azide in 20 ml. PhMe
     refluxed 2 hrs. with 5 ml. PhCH2OH to give 4.2 g. XXX (R = H, R1 = R2 = R3
     = R4 = R5 = MeO) (XXXI), m. 178-9° (EtOH). The following XXX were
     similarly prepared (R, R1, R2, R3, R4, R5, and m.p. given): H, H, H, H, H,
     H, 119-20° (Et2O) and 109-10° (EtOH); H, MeO, MeO, H, MeO,
     MeO, 175-6° (CHCl3EtOH); MeO, MeO, MeO, H, MeO, MeO, 147-9°
     (EtOH); H, (R1R2 = ) CH2O2, MeO, MeO, MeO, 182-39 (CHC13-EtOH).
     XXXI in 75 ml. AcOH hydrogenated over 100 mg. 10% Pd-C at room temperature and
     atmospheric pressure (hydrogenation was rapid), and the mixture worked up gave
2.85
     g. XXXII (R = H, R1 = R2 = R3 = R4 = R5 = MeO) (XXXIII), b0.001
     180°, m. 109-11° (MeOH-2O) HCl salt m. 278-80°
     (decomposition) (H2O); N-Ac derivative m. 204-5° (EtOH), H maleate m.
     198-9° (decomposition) (Me2CO); N-Bz derivative m. 240-1°
     (CH2Cl2-MeOH). Xa (4.16 g.) converted to the azide as above, the crude
     azide refluxed 3 hrs. in 20 ml. MeOH, and the solution concentrated gave 3.55
g. Me
     urethan analog (XXXIV) of XXXI, m. 190-1° (CHCl3--EtOH). XXXIV (2
     g.) in 40 ml. EtOH and 40 ml. 40% aqueous NaOH refluxed overnight and worked
     up gave 320 mg. XXXIII, m. 109-11°. Xa converted to the azide as
     above, the acidic aqueous solution of the azide added to 250 ml. boiling 2 N \,
     and the whole boiled and stirred 15 min. and worked up gave 1.7 g.
     putative N,N'-bis [1-(3,4,5-trimethoxyphenyl)-6,7- dimethoxy-2-
     tetralyl]urea, m. 255-6° the mother liquor gave 1.8 g. XXXIII.HCl,
     m. 277-9° (H2O). The following XXXII were prepared (R, R1, R2, R3,
     R4, R5, m.p., m.p. HCl salt, and m.p. N-Ac derivative given): H, H, H, H, H,
     H, 67-8° (petr. ether), 280-1° (decomposition) (EtOH),
     175-6° (EtOH); H, MeO, MeO, H, MeO, MeO, 15-2° (EtOH),
     270-2° (decomposition) (H2O-EtOH), 224-5° (EtOH-H2O); MeO, MeO,
    MeO, H, MeO, MeO, 101-2° (EtOH-Et2O), 252-3° (decomposition)
     (EtOH), 191-2° (EtOH); H, (R1R2 =) CH2O2, MeO, MeO, MeO,
     152-3° (EtOH), 274-5° (decomposition) (H2OEtOH), 227-8°
     (EtOH-H2O). XXIII (15 g.), 150 ml. MeOH, and 15 ml. ethylene oxide kept
    overnight at room temperature and 2 hrs. at 60° in a closed vessel and
    worked up gave 92% XXXIV (R = H,R1 = R2 = R3 = R4 = R5 = MeO) (XXXV), m.
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at 20°) m. 132-3° (MeOH). XXV (1 g.) in 10 ml. Ac20

HCl.

107-8° (Et2O); methanolate m. 86-7° (MeOH). XXXV (0.8 g.), 5 ml. pyridine, and 3 ml. Ac2O kept overnight at room temperature and worked up gave the di-O-Ac derivative of XXXV, b0.001 220°. The following XXXIV were prepared (R, R1, R2, R3, R4, R5, m.p., and b.p./mm. of di-O-Ac derivative given): H, H, H, H, H, H, 133-4° (MeOH), -; H, MeO, MeO, H, MeO, MeO, MeO, 114-15° (CH2Cl2Et2O), -; MeO, MeO, MeO, H, MeO, MeO, 95-6° (CH2Cl2Et2O), 225-30°/0.001; H, (R1R2 =) CH2O2, MeO, MeO, MeO, 208-9° (EtOH), 215°/0.001. XXXV (15 g.) and 10 ml. SOCl2 in 150 ml. CH2Cl2 heated and stirred 1 hr. at 60° and the solution evaporated in vacuo gave 16.1 g. XXXVI (R = H, R1 = R2 = R3 = R4 = R5

MeO) HCl salt (XXXVII.HCl), m. 210-12° (decomposition) (Me2CO). XXXVII.HCl (15 g.) gave 12.3 g. XXXVII, m. 123-4 $^{\circ}$  (MeOH). The following XXXVI were prepared (R, R1, R2, R3, R4, R5, m.p., and m.p. HCl salt given): H, H, H, H, H, H, 80-1° (petr. ether), -; H, MeO, MeO, H, MeO, MeO, 113-14° (Et2O), 196-8° (decomposition) (MeOH-Me2CO); MeO, MeO, MeO, H, MeO, MeO, -,  $166^{\circ}$  (decomposition) (EtOAc); H, (RR2 =) CH2O2, MeO, MeO, MeO, 139-40° (Me2CO-MeOH), 205-6° (decomposition) (EtOH-Me2CO). Most of the new compds. were used in orientation studies for cytostatic activity. Of the investigated IX, XI, XXVII, XXXII, and γ-lactones of 1-aryl-4-hydroxytetralin-2-carboxylic acids, only the 6,7-methylene-3',4',5'-trimethoxy-substituted representatives exhibited a significant inhibiting action of cell division in in vitro tests with P-815 mastocytoma cell cultures. The XXXVI cell showed a strong inhibition of cell increase in cell cultures with mouse ascites tumor. Results of other pharmacol. tests, as well as infrared and ultraviolet spectral data, were given.

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CN Urea, 1,3-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2-naphthyl]- (7CI, 8CI) (CA INDEX NAME)